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GUDRUN E. HUCKETT DRAUDT
LONSSTR. 53
WUPPERTAL, 42289
GERMANY

EXAMINER

MORRISON, THOMAS A

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Objections

1. Claims 1-21 are objected to because of the following informalities: (1) claim 1 recites "[c1]". This recitation should be deleted. Claims 2-21 have similar recitations, which should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear if the device transports sheets of paper or plastic material. Lines 1-2 indicate sheets of paper or plastic material, and then line 4 of claim 1 indicates paper sheets.

Claim 1 recites "the at least one ramp member" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites "the transport plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites "the first pressing roller" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 8, it is unclear what is meant by "driven permanently".

The term "a minimal coefficient of friction" in claim 14 is a relative term which renders the claim indefinite. The term "minimal" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 7, 9, 12-14, 16-17 and 21, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,178,379 (Edwards et al.).

Regarding claim 1, Figs. 2-7 show a single sheet collecting device for stacking sheets of paper or plastic material, the single sheet collecting device comprising:

at least one transport element (52) transporting paper sheets in a transport direction;

at least one stop unit (including 80 and 82) arranged in a transport path of the paper sheets in the transport direction;

at least one ramp device (62) configured to lift the paper sheets during transport briefly out of a transport plane of the transport path;

at least one pressing device (including 110, 90 and 92) arranged in the transport path of the sheets between the at least one ramp member (62) and the at least one stop unit (including 80 and 82), wherein the at least one pressing device (including 110, 90 and 92) presses the sheets of a stack against one another.

Regarding claim 2, Figs. 2-7 show that the at least one pressing device (including 110, 90 and 92) is formed by at least two pressing rollers (90 and 110) positioned above one another.

Regarding claim 3, Figs. 2-7 show that a first one of the at least two pressing rollers (90) is positioned above the transport plane and a second one of the at least two pressing rollers (110) is positioned underneath the transport plane.

Regarding claim 7, Figs. 2-7 show that the at least two pressing rollers (90 and 110) are driven in opposite directions. When rotated, roller 90 is rotated counterclockwise, while roller 110 is being rotated clockwise.

Regarding claim 9, Figs. 2-7 show that a first one of the at least two pressing rollers (90) is forced-loaded by a force.

Regarding claim 12, as best understood, the force is smaller than static friction of the sheets within the stack of sheets.

Regarding claim 13, as best understood, Figs. 2-7 show that the at least two pressing rollers (90 and 110) are identical.

Regarding claim 14, as best understood, the at least two pressing rollers (90 and 110) consist of a material having a minimal coefficient of friction.

Regarding claim 16, Figs. 2-7 show one or more tensioning elements (94 and 96) arranged in the transport direction upstream of the at least one pressing device (including 110, 90 and 92).

Regarding claim 17, Figs. 2-7 show that the at least one pressing device (including 110, 90 and 92) comprises at least two pressing rollers (90 and 92), wherein the at least two pressing rollers (90 and 92) each have one of the tensioning elements (94 and 96) arranged thereat.

Regarding claim 21, Figs. 2-7 show that the at least one transport element (52) is a transport belt.

4. Claims 1 and 21, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5775,689 (Moser et al).

Regarding claim 1, Figs. 1-8 show a single sheet collecting device for stacking sheets of paper or plastic material, the single sheet collecting device comprising:

- at least one transport element (UB or LB) transporting paper sheets in a transport direction;

- at least one stop unit (150) arranged in a transport path of the paper sheets in the transport direction;

- at least one ramp device (80) configured to lift the paper sheets during transport briefly out of a transport plane of the transport path;

- at least one pressing device (including 130 and 98) arranged in the transport path of the sheets between the at least one ramp member (80) and the at least one stop

unit (150), wherein the at least one pressing device (including 130 and 98) presses the sheets of a stack against one another.

Regarding claim 21, Figs. 1-8 show that the at least one transport element (UB or LB) is a transport belt.

5. Claims 1-3, 7-10, 13-14, 16-18 and 21, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,805,891 (Luperti et al.).

Regarding claim 1, Figs. 1-10 show a single sheet collecting device for stacking sheets of paper or plastic material, the single sheet collecting device comprising:

at least one transport element (82) transporting paper sheets in a transport direction;

at least one stop unit (including 92) arranged in a transport path of the paper sheets in the transport direction;

at least one ramp device (47) configured to lift the paper sheets during transport briefly out of a transport plane of the transport path;

at least one pressing device (including 116, 118, 120 and portion of 86 near numeral 14) arranged in the transport path of the sheets between the at least one ramp member (47) and the at least one stop unit (including 92), wherein the at least one pressing device (including 116, 118, 120 and portion of 86 near numeral 14) presses the sheets of a stack against one another.

Regarding claim 2, Figs. 1-10 show that the at least one pressing device (including 116, 118, 120 and portion of 86 near numeral 14) is formed by at least two pressing rollers (116 and 118) positioned above one another.

Regarding claim 3, Fig. 5 shows that a first one of the at least two pressing rollers (116) is positioned above the transport plane and a second one of the at least two pressing rollers (118) is positioned underneath the transport plane.

Regarding claim 7, Figs. 1-10 show that the at least two pressing rollers (116 and 118) are driven in opposite directions (i.e., 118 will rotate counterclockwise, while 116 is rotating clockwise).

Regarding claim 8, Figs. 1-10 show that the pressing rollers (116 and 118) are driven permanently (via element 86).

Regarding claim 9, Figs. 1-10 show that a first one of the at least two pressing rollers (118) is forced-loaded by a force.

Regarding claim 10, Figs. 1-10 show that the force is a spring force (e.g., spring force of element 86).

Regarding claim 13, Figs. 1-10 show that the at least two pressing rollers (118 and 116) are identical (i.e., identical, in that they are both idle rollers).

Regarding claim 14, Figs. 1-10 show that the at least two pressing rollers (116 and 118) consist of a material having a minimal coefficient of friction.

Regarding claim 16, Figs. 1-10 show one or more tensioning elements (114) arranged in the transport direction upstream of the at least one pressing device (including 116, 118, 120 and portion of 86 near numeral 14).

Regarding claim 17, Figs. 1-10 show that the at least one pressing device (including 116, 118, 120 and portion of 86 near numeral 14) comprises at least two pressing rollers (116 and 1118), wherein the at least two pressing rollers (116 and 1118) each have one of the tensioning elements (114) arranged thereat.

Regarding claim 18, Figs. 1-10 show that the one or more tensioning elements (114) are tensioning rollers.

Regarding claim 21, Figs. 1-10 show that the at least one transport element (82) is a transport belt.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,178,379 (Edwards et al.). The Edwards et al. patent discloses the claimed invention except for adjusting the force of the pressing rollers. It would have been obvious to one having ordinary skill in the art at the time the invention was made allow the force of the pressing rollers to be adjusted, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 192. One of ordinary skill in the art would have been motivated to make the force of the pressing rollers adjustable in order to provide sufficient stacking

force to the stack of sheets, while also avoiding the possibility of applying a force that damages the stack of sheets.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,178,379 (Edwards et al.) as applied to claim 14 above, and further in view of U.S. Patent No. 5,924,550 (Karpinsky). The Edwards et al. patent discloses most of the features of claim 15, but does not specifically disclose that the pressing rollers (90 and 110) are steel.

Karpinsky discloses that it is well known to provide a belt conveying apparatus with rollers (34) made of steel. See e.g., column 4, lines 65-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Edwards et al. apparatus with pressing rollers (90 and 110) made of steel to provide sufficient strength and wear characteristics, as shown in Karpinsky.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,805,891 (Luperti et al.). The Luperti et al. patent discloses the claimed invention except for the tensioning rollers (i.e., **one** or more tensioning elements (114)) having a smaller diameter than the at least two pressing rollers (116 and 118). It would have been an obvious matter of design choice to select the diameter of the tensioning roller (114) to be smaller than the diameters of the at least two pressing rollers (116 and 118), since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). One of ordinary skill in the art would have been motivated to select a diameter of the

tensioning roller (114) that is smaller than that of the at least two pressing rollers (116 and 118) in order to provide sufficient clearance between the top of the tensioning roller (114) and element (82) so that sheets can travel up the ramp (47) and enter between the tensioning roller (114) and element (82), as shown in Figs. 5-6 of Luperti et al.

Allowable Subject Matter

9. Claims 4-6 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. .


Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08/05/2006



**PATRICK MACKEY
PRIMARY EXAMINER**